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## NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

06/15/2009

MR. WILLIAM H. CHANG  
FLEXIWORLD TECHNOLOGIES, INC.  
PMB 267  
3439 N.E. SANDY BLVD.  
PORTLAND, OR 97232-1959

EXAMINER

POPOVICI, DOV

ART UNIT

PAPER NUMBER

2625

DATE MAILED: 06/15/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,651	01/18/2002	William Ho Chang		4711

TITLE OF INVENTION: METHODS FOR UNIVERSAL DATA OUTPUT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	09/15/2009

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

**HOW TO REPLY TO THIS NOTICE:****I. Review the SMALL ENTITY status shown above.**

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

**II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.**

**III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.**

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

## PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail Stop ISSUE FEE**  
**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, Virginia 22313-1450**  
**or Fax (571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

7590                    06/15/2009

**MR. WILLIAM H. CHANG**  
**FLEXIWORLD TECHNOLOGIES, INC.**  
**PMB 267**  
**3439 N.E. SANDY BLVD.**  
**PORTLAND, OR 97232-1959**

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

### **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)

(Signature)

(Date)

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10/053,651	01/18/2002	William Ho Chang		4711

TITLE OF INVENTION: METHODS FOR UNIVERSAL DATA OUTPUT

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nonprovisional	YES	\$755	\$300	\$0	\$1055	09/15/2009
EXAMINER	ART UNIT		CLASS-SUBCLASS			
POPOVICI, DOV	2625		358-001150			

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
 "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 \_\_\_\_\_  
2 \_\_\_\_\_  
3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent):  Individual  Corporation or other private group entity  Government

4a. The following fee(s) are submitted:

- Issue Fee  
 Publication Fee (No small entity discount permitted)  
 Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- A check is enclosed.  
 Payment by credit card. Form PTO-2038 is attached.  
 The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.  b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

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This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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7590	06/15/2009			
EXAMINER				
POPOVICI, DOV				
ART UNIT		PAPER NUMBER		
2625		DATE MAILED: 06/15/2009		

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1254 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1254 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/053,651	CHANG ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	

Dov Popovici  
2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTO-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to the RCE request and the IDS filed on 06/09/2009.
2.  The allowed claim(s) is/are 23-59, renumbered as claims 1-37.
3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All    b)  Some\*    c)  None    of the:
    1.  Certified copies of the priority documents have been received.
    2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 06/09/2009
4.  Examiner's Comment Regarding Requirement for Deposit of Biological Material
5.  Notice of Informal Patent Application
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

/Dov Popovici/  
Primary Examiner, Art Unit 2625

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 06/09/2009 has been entered.

**REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance:

Yoshida (U.S. Patent No. 7,366,468) discloses a printer apparatus including a reception device adapted to wirelessly receive an inquiry signal which is transmitted by a wireless communication apparatus in order to search surrounding devices, and a transmission device adapted to transmit a response signal to the inquiry signal received by the reception device. The response signal includes information indicating that the printer is a specified printer which is pre-registered in the wireless communication apparatus and information indicating that the printer is operating in a printing process (see column 2, lines 35-45).

However, the closest prior art of record, Yoshida (U.S. Patent No. 7,366,468) does not disclose, teach or suggest, receiving at the information apparatus and over the wireless communication channel at least one attribute corresponding to each wireless output device found in the search; selecting at

the information apparatus a wireless output device found in the search based at least in part on a received attribute; generating at the information apparatus an intermediate output data that includes said one or more output images, the intermediate output data conforming at least partly based on said received attribute of the selected output device; converting at the output controller, the intermediate output data into an output data acceptable for rendering at the output device, and conforming at the output device the output data into a data format that is acceptable for rendering by a rendering engine in the output device, and delivering the data format to the rendering engine for output, whereby, the information apparatus is able to output, in a mobile pervasive manner, one or more images representative of said content to an output device without the need to install an output device driver specific to that output device, as claimed in independent claim 23.

The closest prior art of record, Yoshida (U.S. Patent No. 7,366,468) does not disclose, teach or suggest, receiving over the wireless communication channel at least one device attribute associated with at least one available wireless output device, the device attribute including at least an indication of a supported output device profile; selecting a wireless output device found in the search based at least in part on the received device attribute; conforming at the information apparatus at least part of the content into one or more device independent output images with at least one predefined or standard parameter; generating at the information apparatus an intermediate output data that includes said one or more output images, the intermediate output data conforming at least

partly to said supported output device profile of a selected output that is included in said device attribute of the selected wireless output device and received over the wireless communication channel; decoding at the output device the intermediate output data; converting at said output device the intermediate output data into an output data format acceptable for rendering by an output engine included in said output device, and whereby the wireless information apparatus is able to pervasively output one or more images representative of said content to an output device without need to install an output device driver specific to that output device, as recited in independent claim 31.

The closest prior art of record, Yoshida (U.S. Patent No. 7,366,468) does not disclose, teach or suggest, receiving over the wireless communication channel an attribute corresponding to each discovered wireless device, the attribute including one or more of a name, a device type, a device address, and an indication of a supported output device profile; selecting a wireless output device from among the one or more discovered wireless devices based at least in part on the received attribute; obtaining a security key at the information apparatus, the security key enabling wireless data transfer to the selected output device; sending a security code related at least partly to the security key over the wireless communication channel and requesting the selected wireless output device to open a wireless connection channel for data transfer; receiving over the wireless communication channel a response related to an authentication; and if the received response is positive, establishing a wireless connection channel between the information apparatus and the selected wireless output device,

conforming, at the information apparatus, at least part of the content into an output data encoded with at least one format, the conforming relating at least in part to the attribute received over the wireless communication channel, and transferring the output data from the information apparatus to the selected output device over said wireless connection channel for rendering, receiving at the selected output device the output data, performing at the selected output device at least one decoding operation on said output data, and converting the output data into an output engine data acceptable for rendering by an output engine included in the selected output device, as claimed in independent claim 35.

The closest prior art of record, Yoshida (U.S. Patent No. 7,366,468) does not disclose, teach or suggest, receiving at the information apparatus and over the wireless communication channel at least one attribute corresponding to each wireless output device found in the search; selecting at the information apparatus a selected wireless output device found in the search based at least in part on a received attribute, the selected wireless output device having an associated output controller; conforming at the information apparatus at least part of the content into one or more output images; generating at the information apparatus an intermediate output data that includes said one or more output images; the intermediate output data being at least partly compatible with said received attribute of the selected wireless output device; and wirelessly transmitting the intermediate output data from the information apparatus to the selected wireless output device where the intermediate output data are decoded for rendering at

the output device, in combination with accessing, opening, searching wirelessly and establishing a wireless connection, as recited in independent claim 45.

The closest prior art of record, Yoshida (U.S. Patent No. 7,366,468) does not disclose, teach or suggest, receiving over the wireless communication channel at least one device attribute associated with at least one available wireless output device, the device attribute including at least an indication of a supported output device profile; selecting a wireless output device found in the search based at least in part on the received device attribute; conforming at the information apparatus at least part of the content into one or more device independent output images with at least one predefined or standard parameter; generating at the information apparatus an intermediate output data that includes said one or more output images, the intermediate output data conforming at least partly to said supported output device profile of a selected output that is included in said device attribute of the selected wireless output device and received over the wireless communication channel; and delivering the intermediate output data over the wireless connection for rendering at the selected wireless output device for rendering, in combination with opening, searching wirelessly and establishing a point to point wireless connection, as claimed in independent claim 50.

The closest prior art of record, Yoshida (U.S. Patent No. 7,366,468) does not disclose, teach or suggest, receiving over the wireless communication channel an attribute corresponding to each discovered wireless device, the attribute including one or more of a name, a device type, a device address, and

an indication of a supported output device profile; selecting a wireless output device from among the one or more discovered wireless devices based at least in part on the received attribute; obtaining a security key at the information apparatus, the security key enabling wireless data transfer to the selected output device; sending at least part of the security key over the wireless communication channel and requesting the selected wireless output device to open a wireless connection channel for data transfer; receiving over the wireless communication channel a response related to an authentication; and if the received response is positive, establishing a wireless connection channel between the information apparatus and the selected wireless output device, and conforming, at the information apparatus, at least part of the content into an output data encoded with at least one format, the conforming relating at least in part to the attribute received over the wireless communication channel, and transferring the output data from the information apparatus to the selected output device over said wireless connection channel for rendering, in combination with opening and discovering wirelessly one or more wireless devices that are available for wireless connection, as recited in independent claim 55.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dov Popovici whose telephone number is 571-272-4083. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dov Popovici/  
Primary Examiner, Art Unit 2625